

Unit 4: Bullying

DAY 2: Detours – roots (-solv/solu- and -tain/ten-)

Content Objectives:

1. Students will discover the meanings of the roots –solv/solu- and –tain/ten- .
2. Students will identify and underline the roots –solv/solu- and –tain/ten- in words that contain them.

Language Objectives:

1. Students explain how the meanings of the roots –solv/solu- and –tain/ten- help us understand the meanings of words that contain them.

Teacher materials:

1. objectives overhead
2. –solv/solu- overhead
3. -tain- overhead
4. a plastic cup, a pebble, an airborne tablet, and water for the –solv/-solu activity
5. white board markers
6. instructions for you, the teacher, on how to make a paper cup – you can find these online (e.g. <http://www.origami-fun.com/origami-drinking-cup.html>; also youtube videos)

Student materials:

1. student worksheets for –solv/solu- and –tain/ten-
2. A length of string with a knot in it
3. a piece of paper to make a paper cup
4. binders, pencil, and green, yellow, and red markers

Day at a Glance:

1. (5-10 min) **Introduce** objectives and **review** the suffixes –er/-or and -ist and the roots –dict- and –script/scrib-
2. (20 min) **Introduce** the root –solv/solu- through a demonstration and worksheet
3. (15 min) **Introduce** the root –tain/ten- through a cup activity and worksheet
4. (5 min) **Wrap-up** – review objectives

Activities

*****5 MINUTES – INTRODUCE OBJECTIVES AND REVIEW MEANINGFUL WORD PARTS AND ER/OR/IST SUFFIXES*****

(introduce objectives)

- **Let's take a look at our objectives for today.** [Point to screen with objectives on it.]
- **Our content objectives are to discover the meaning of the roots – solv/solu- and –tain/ten-, and to identify and underline these roots in words that contain them, and our language objective is to explain how the meaning of the roots helps us understand the meanings of the words.**

(review meaningful word parts and the traffic light metaphor)

- **Yesterday we spoke about the three parts of a word. Who remembers what they are?** [prefix, root, suffix.]
- **Do all words always have all three parts?** [No. They all have a main part, or a root.]
- **We also used our traffic light symbols to help us remember the three meaningful parts of a word.** [Show each mini-poster as you discuss it, but cover the text at the top until you've elicited that information from the students.]
- **What does the green light stand for?** [prefix] **Why?** [It comes at the beginning of a word.]
- **Right, and what does a prefix do?** [It changes the meaning of a word.] **What does the yellow light stand for?** [root] **Why?** [You should slow down and think about the core meaning of the word.]
- **Good, and how about the red light?** [suffix] **Why?** [It's the end of the word, so you should stop and think about the part of speech.]

(review suffixes –er/or and –ist)

- **Great! Yesterday, we talked about suffixes for the first time. Who remembers what suffixes we talked about?** [-er/-or and –ist].
- **Right, -er/-or and –ist. Like actor or teacher.**
- **What does the –er/-or or –ist suffix do to a word?** [It makes it into 'someone who does something.'] **Right, it makes it into a person**

word – someone who does something – like a baker is someone who bakes.

- **So what part of speech is that, if it's a person word? [noun]. Right, it's a noun – words that end in –er/-or or –ist are all nouns.**
- **Let's see how many –er/-or or –ist words we can come up with in one minute.** [Have students call out words while you write them on the board – write them in the same three columns as yesterday – one for –er, one for –or, and one for –ist.]
- **Nice job, everyone.**

*****20 MINUTES –SOLV/SOLU- DEMONSTRATION AND WORKSHEET*****

(demonstration)

- Have the glass of water, pebble or marble, and tablet ready.
- **Today we are going to learn another root. Maybe you can guess it by watching what I'm going to do.**
- [Drop the pebble or marble.] **Is anything happening?**
- [Drop the tablet.] **How about now?** [The tablet is *dissolving*—it's becoming mixed with the water and disappearing; the water is a *solution*—or a liquid in which a solid substance has been dissolved. See if the students can produce the words *dissolve* and *solution* on their own. When they do, write them on the board.]
- **Look at these words** (*dissolve* and *solution*).
- **They have the same root. What do you think the root is? Think of the tablet—what do you think the root might mean?** [Anticipated responses – to break apart, to come apart, to go away]
- Show the top of -solv/solu- overhead with the suffix box.
- **The root solv/or solu means “to loosen.” Think of what we just did with the tablet.**
- **Does “loosen” make sense? How?** [Yes, the tablet was solid, and then “loosened” into smaller and smaller pieces as it *dissolved*, until it disappeared altogether.]
- **Solution is the word for this liquid** (point to the *solution*) **but it also has another meaning.**

- **Who can tell me another meaning of solution?** [A solution is the answer to a puzzle or problem.]
- Pass out one piece of string for each student and hold one yourself.
- **Let's think a moment about this second meaning of solution** (an answer to a problem).
- **Imagine that this knot in your piece of string stands for a problem.** [Hold your piece of string and put your finger over the knot.]
- **I'm going to imagine that my problem is that my back hurts and I can't do all of my own shoveling this winter.**
- **Now I'm going to think of a solution, and I'm going to LOOSEN this knot as I imagine the solution. My solution to my problem is that I can pay the boy and girl who live next door to shovel my walkway for me.** [Loosen the knot as you make this statement, and show the loosened knot to the students.]

(worksheet)

VISUALIZATION:

- **Now I want you to do the same thing.**
- **Close your eyes, feel the knot and think about a problem that it could represent. Now, think of a possible solution to that problem. Start LOOSENING the knot as you think about the solution.**
- Show the full –solv/solu- overhead and pass out the student worksheet version. Have the students complete the worksheet alone or in pairs and ask them to discuss their answers with a partner.
- Ask 2 or 3 students to share with the whole class. Anticipated responses to question 3: a solution helps the problem to get easier to deal with, to help you relax and feel less anxious about it – it might even help the problem get smaller and smaller until it goes away altogether, the same as the tablet got smaller and smaller until it dissolved altogether.
- Collect the strings when you are done.

*****15 MINUTES – TAIN/TEN- CUP ACTIVITY AND WORKSHEET*****

(cup activity)

- **Now we're going to talk about another root –tain-, which shows up in some words as –ten-.**
- Ask a student to come up and hold the original solution you made with the tablet. Place a flat sheet on your hand as a cup.
- **What would happen if _____ (name of the student who is there) poured this solution onto my sheet of paper? Would the paper HOLD it?** [No. A flat sheet can't "hold" the water. It's not a container.]
- **How about if it looked like this?** [Impress them by quickly making a cup out of the sheet – use the directions included with the script if you're not sure how to do this.]
- Ask the student to fill the cup with a little bit of the solution. It will work – but not for too long, so be sure you have a place to throw the cup away.
- Distribute the sheets of paper and have the students make their own cups as you model for them, step by step.
- Tell them they can use their cups to contain things as well.
- **So why does a paper cup work and a flat sheet of paper not work?** [A cup is a container, it HOLDS the water.]

(worksheet)

- Show the –tain/ten- overhead and pass out the student worksheets.
- Discuss how the picture of the hand holding the ball shows the meaning of the root –tain/ten-.
- Move the students' attention to the table and the first picture of the container.
- Ask the students to divide the word container with you: **How would you divide this word into parts that can help you figure it out?**
- **Let's use our markers to divide this word into the prefix, root, and suffix.** [con (prefix – green) – tain (root – yellow) – er (suffix – red).]
- **Which part did we say has the meaning "hold" in it: con-, -tain-, or -er?** [tain – the root – the root always has the core meaning of the word]
- Discuss and write the answer to the first question below the table- **What does a container "do?"** [highlight it on the overhead.] **Right, a**

***container* holds something, just like the *container* or cup I made held the solution.**

- **Now let's look at the second picture.** [point to the *retainer*].
- **Who knows what a *retainer* is?** [It holds/keeps teeth in place after braces are off.]
- **Let's use our markers to divide this work into the prefix, root, and suffix.** [Ask the students to figure out the parts and meaning of *retainer* on their own – remind them to be careful since re- has more than one meaning. Review the answers and write them onto your overhead – re/tain/er.]
- **Discuss and write the answer to the last question - What does a *retainer* “do?”** [highlight it on the overhead.] **Right, a *retainer* holds back your teeth – it holds them in place after you've had braces.**

(review suffixes –er/or)

- **We can see here that the suffix -er turns the verbs *contain* and *retain* into nouns: something that *contains* or *retains*.**
- **Yesterday we learned how the suffixes –er and –or changed verbs *invent* or *garden* into nouns that meant “people who” *invent* things or *garden*.**
- **Today we're learning that the suffix -er can mean ‘things that do something’ in addition to ‘people who do something.’**

(review *maintain* from previous unit)

- **Ok, one last thing. In our last unit on overcoming adversity, we learned a word that has the root –tain-, but we hadn't learned this root yet so we didn't realize it. Does anyone remember what that word was?** [*maintain*]
- **Right, we learned the word *maintain* in the last unit? And who remembers what that word means?** [to continue to do something]
- **Right, like you can *maintain* high grades by continuing to study, or you can *maintain* a good attitude toward school by continuing to think of all of the things that you enjoy at school.**
- **So how does the meaning of the root –tain- as HOLD make sense in the meaning of the word *maintain*?** [if you *maintain* something, you hold onto it – like you hold onto good grades or you hold onto a good attitude.]

*****5 MINUTES – WRAP-UP*****

- Post the objectives for the day and read them or have a student read them.
- Ask the students to do a thumbs up/thumbs down to let you know whether or not they think you all completed the objectives for the day.
- Have the students put their worksheets behind the ‘roots’ tab of the Detours side of their binders, and their pencils and markers back in the pencil pouches.
- Put the binders away.